

REMARKS

Claims 1-17 were pending.

Claim 17 is cancelled.

Claims 1-16 are now pending.

Claims 1-17 are rejected.

35 USC 112, second paragraph and 35 USC 101

Claim 17 is rejected under 35 USC 112, second paragraph and 35 USC 101. Claim 17 is cancelled making the rejection moot.

35 USC 102 (b)

Claims 1-17 are rejected under 35 USC 102(b) as being anticipated by Fletcher, US 6,255,483.

The present invention pertains to a composition comprising

(A) a selected bisbiphenyl hydroxy phenyl triazine, and

(B) a compound selected from benzotriazoles of the formula (IIa), 2-hydroxybenzophenones of the formula (IIb), oxalanilides of the formula (IIc), 2-hydroxyphenyltriazines of formula (IIId), cinnamates of formula (IIe), and benzoates of formula (IIIf).

US '483 pertains to mono- and bis-biphenylhydroxyphenyl triazine of formula (1) and (1a). The generic biphenyl triazines encompass the presently claimed component (A). A few of the worked examples, i.e. examples 11b, 16-20, 22 and 24, are encompassed by the presently claimed component (A).

US '483 also relates to compositions comprising a compound of formula (1) or (1a) (col. 15, l. 9-13). The compound of formula (1a) of (1) can also be a mixture of such compounds (col. 15, l. 27-28).

For clarity, the Applicants point out that 2-hydroxyphenyltriazines of formula (IIId) of the present application do **not** encompass mono- and bis-biphenylhydroxyphenyl triazines. Consequently, mixtures of compounds of formula (1a) of (1) are not encompassed by the present claims.

The compositions of US '483 may comprise other stabilizers or additives, for example antioxidants, further light stabilizers, metal deactivators, phosphites or phosphonites. A list of considerable length of such stabilizers is given (col. 15-22).

In US '483, the only three specific disclosures of a combination of a bisbiphenyl hydroxy phenyl triazine (BBP-HPT) and a light stabilizer are given in example 25, namely the compounds of examples 16, 19 and 21 in combination with a sterically hindered amine (formula 125). The compounds of examples 16 and 19 are encompassed by the present component (A) but a sterically hindered amine is not a UV absorber. So, these combinations are not encompassed by the present claims.

Consequently, there is **no** specific disclosure of the present combination of a component (A) and a component (B) in US '483.

Moreover, there is **no** unambiguous generic disclosure of the present combination of (A) selected BBP-HPT, and (B) a compound selected from benzotriazoles of the formula (IIa), 2-hydroxybenzophenones of the formula (IIb), oxalanilides of the formula (IIc), 2-hydroxyphenyltriazines of formula (IIId), cinnamates of formula (IIe), and benzoates of formula (IIIf).

US '483 teaches that compositions stabilized with a compound of formula (1) or (1a) are better stabilized than unstabilized compositions (see examples 24-26). US '483 also teaches that compositions stabilized with a combination of a compound of formula (1) or (1a) and a sterically hindered amine are better stabilized than unstabilized compositions or compositions only stabilized with a sterically hindered amine (see examples 25, tables 2 and 4). Moreover, US '483 teaches that a composition comprising a monobiphenyl hydroxy phenyl triazine is better stabilized than an unstabilized composition or a composition stabilized with a benzotriazole (formula 126, commercially available as Mark LA 31) (see example 26).

So to arrive at the present invention, a person skilled in the art has to choose few selected BBP-HPT from the huge number of mono- and bis-biphenyl hydroxy phenyl triazines of formula (1) and (1a) described in US '483, and additionally has to choose from a stabilizer list of considerable length the present component (B), i.e. benzotriazoles of the formula (IIa), 2-hydroxybenzophenones of the formula (IIb), oxalanilides of the formula (IIc), 2-hydroxyphenyltriazines of formula (IIId), cinnamates of formula (IIe), and benzoates of formula (IIIf).

Consequently, the Applicants submit that the present claims are novel in view of US '483.

35 USC 103(a)

Claims 1-17 are rejected under 35 USC 103(a) as being unpatentable over Fletcher et al., US 6,255,483.

As already mentioned above, US '483 teaches that compositions stabilized with a compound of formula (1) or (1a) are better stabilized than unstabilized compositions (see examples 24-26). US '483 also teaches that compositions stabilized with a combination of a compound of formula (1) or (1a) and a sterically hindered amine are better stabilized than unstabilized compositions or compositions only stabilized with a sterically hindered amine (see examples 25, tables 2 and 4).

As the examiner acknowledges, Fletcher teaches the equivalency of the mono- and bisbiphenyl hydroxy phenyl triazines in col. 1-8 and the exemplified mono- and bisbiphenyl hydroxy phenyl triazines in col. 31-46.

The Applicants respectfully point out that the examiner has erred in stating that Fletcher teaches the equivalency of the stabilizers as of col. 15, l. 29 to col. 22 with the mono- and bisbiphenyl hydroxy phenyl triazines in col. 1-8 and the exemplified mono- and bisbiphenyl hydroxy phenyl triazines in col. 31-46.

Fletcher teaches that a composition comprising a monobiphenyl hydroxy phenyl triazine is better stabilized than an unstabilized composition or a composition stabilized with a benzotriazole (formula 126, corresponding to compound v, page 5 of the present description, i.e. a benzotriazole of formula (IIa)) (see example 26). Thus contrary to the examiners allegation, Fletcher teaches that mono- and bisbiphenyl hydroxy phenyl triazines are better stabilizers than the stabilizers of col. 15, l. 29 to col. 22.

The presently claimed combinations surprisingly improve the durability of polymer compositions compared to compositions stabilized with bisbiphenyl hydroxy phenyl triazine as the only UV absorber.

The comparative test of table 3B on page 91 of the description shows that the BBP-HPT (compound A1) as the only UV absorber improves the gloss retention of a clear coating compared to a benzotriazole (BZT; compound vii) of the stabilizer list of Fletcher, col. 15, l. 29 to col. 22 as the only UV absorber. This finding was expected in view of the teaching of Fletcher.

Table 3B on page 91 of the description shows that in a polyurethane clear coating, the UV absorber combination according to the invention improves the gloss retention after weathering considerably compared to clear coating containing the single UV absorbers.

So a clear coating containing a combination of a BBP-HPT and a BZT has even a higher gloss retention than a clear coating containing the same BBP-HPT as the only UV absorber.

The enclosed declaration under 37 CFR 1.132 shows that the combinations according to the invention have a considerable synergistic effect and that polycarbonate compositions comprising the presently claimed combinations are much less prone to yellowing after weathering than such polycarbonate compositions comprising the single UV absorbers.

These results are wholly surprising. The presently claimed combinations are completely non-obvious for the skilled artisan. This is because he would not even have tested such combination as a skilled artisan who combines a good UV absorber with a fair UV absorber cannot expect that the combination thereof is even better than the good UV absorber.

Consequently, the presently claimed combination is non-obvious in view of the prior art.

Reconsideration and withdrawal of the rejection of claims 1-17 is respectfully solicited in light of the remarks *supra*.

Since there are no other grounds of objection or rejection, passage of this application to issue with claims 1-16 is earnestly solicited.

Applicants submit that the present application is in condition for allowance. In the event that minor amendments will further prosecution, Applicants request that the examiner contact the undersigned representative.

Respectfully submitted,



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Enclosure: Declaration under 1.132